

SERMC Safety SOP 13

From: SERMC Safety (C106)

Subj: SERMC Fall Protection Program

Ref: (a) OPNAV M-5100.23, Navy Safety and Occupational Health Program Manual  
(b) 29 CFR 1910, Occupational Safety and Health Standards  
(c) 29 CFR 1915, Occupational Safety and Health Standards for Shipyard Employment  
(d) OPNAVINST 5100.19 (Series), Navy Safety and Occupational Health (SOH) Program Manual for Forces Afloat  
(e) NAVSEA S0400-AD-URM-010/TUM, Tag-Out User's Manual  
(f) COMUSFLTFORCOMINST 4790.3, Joint Fleet Maintenance Manual (JFMM)

Encl: (1) SERMC Fall Hazard Assessment Form  
(2) SERMC Fall Prevention and Protection Plan  
(3) SERMC Fall Protection Equipment Inspection Form

1. Purpose. The purpose of this Standard Operating Procedure (SOP) is to provide the requirements of Southeast Regional Maintenance Center's (SERMC) Fall Protection Program in accordance with chapter 13 of reference (a).

2. Cancellation. None.

3. Applicability. This SOP applies to SERMC personnel who work at heights, are exposed to fall hazards, and/or require the use of fall protection equipment while conducting repair, maintenance, or inspection work.

4. Responsibilities

a. Department Heads and Supervisors will:

(1) Ensure personnel who work at heights and are exposed to fall hazards while conducting repair, maintenance, or inspection work are trained in accordance with this SOP.

(2) Evaluate their personnel's work area(s) to identify potential fall hazards.

b. The Command Fall Protection Manager/Fall Protection Competent Person(s) will:

(1) Develop and implement a Fall Protection Program that complies with references (a), (b), and (c).

(2) Implement a Fall Protection Training Program incorporating the requirements of references (a), (b), and (c) using SERMC's training program as described in Section 10 of this SOP. Training will be documented in ESAMS.

(3) Control and manage fall protection equipment.

(4) Periodically review the command Fall Protection Program.

(5) Establish procedures to ensure fall protection used at SERMC is properly identified and accounted for.

(6) Provide or assist in fall protection training as required.

(7) Conduct assessments of fall hazards using enclosures (1) and (2) as required and take actions to correct deficiencies.

c. Applicable SERMC personnel will:

(1) Comply with the requirements of this SOP.

## 5. Definitions

a. Administrative Controls: Changes in work procedures such as written safety policies, rules, supervision, schedules, and training with the goal of reducing the duration, frequency, and severity of exposure to hazardous situations.

b. Aloft: For the purposes of this SOP, the term aloft will be considered to mean: working at heights on any mast, kingpost, or other structures where the potential for a fall exists.

c. Aloft Zones: Areas identified in the ship's aloft instruction where specific procedures will be followed to control hazardous energy when personnel are working in those areas. Some examples of aloft zone hazards are: rotating or radiating equipment, electrical hazards, asphyxiation hazards,

and the potential for objects to be dropped from heights to lower levels.

c. Anchor Point: A point of attachment for securing Personal Fall Arrest Systems (PFAS) connecting devices. Anchor points for PFAS will be capable of supporting 5,000 lbs. for each employee attached and be independent of the means of supporting or suspending the employee.

d. End User: A person who has met the training requirements outlined in section 10 of this SOP and who is authorized to use PFAS issued by a SERMC Fall Protection Competent Person.

e. Engineering Controls: Method(s) used to isolate the employee from the fall hazard in the work area such as installing a handrail system or covering a deck opening with suitable, durable material.

f. Fall Hazard Assessment: The process of evaluating the work area for potential fall hazards and determining the most effective work controls (i.e. engineering controls, administrative controls or personal protective equipment) needed to conduct work safely.

g. Fall Protection Program Manager/Assistant Manager: SERMC Safety personnel who have completed the training requirements identified in reference 13-1 of reference (a) and who is authorized to develop and implement the Fall Protection Program.

h. Fall Protection Competent Person: A person who has completed the training requirements identified in reference 13-1 of reference (a) and who is knowledgeable of fall protection requirements and equipment, is capable of identifying hazardous or dangerous conditions and has the authority to take immediate corrective actions to reduce or eliminate the condition.

i. Full Body Harness: A design of straps secured around the employee in a manner to distribute the fall arrest forces over at least the thighs, pelvis, waist, chest and shoulders with means for attaching it to other components of the PFAS.

j. Mishap: Any event involving personnel working at heights, exposed to fall hazards and/or using fall protection equipment that results in personal injury or damage.

k. Near-Mishap (Near-Miss): Any event involving personnel working at heights, exposed to fall hazards and/or using fall protection equipment that does not result in personal injury or damage, but had the potential to do so.

l. Personal Fall Arrest System (PFAS): Personal protective equipment (PPE) designed to arrest (or stop) personnel during a fall. PFAS includes, but is not limited to: a full body harness, connecting device(s), deceleration device(s) and an approved anchor point.

m. Suspension Trauma Safety Steps/Relief Step Strap: A coiled strap (in a pouch) attached to the harness which is manually deployed after a fall to help prevent the effects of suspension trauma by allowing the end-user to insert both feet into the loop step to stand up allowing the necessary circulation of blood to the entire body, while assisted rescue is being commenced.

6. Policy. SERMC is committed to providing a safe work environment for its personnel. The safety of personnel during the performance of their work is of the utmost importance. Falls from elevations are the leading cause of injuries and fatalities in the work place. This Fall Protection Program is designed to assist SERMC in identifying potential fall hazards and taking steps to eliminate or reduce personnel exposure to these hazards during the performance of their work.

7. Procedures. SERMC personnel who work at heights, are exposed to fall hazards, and/or who require the use of fall protection equipment will comply with the requirements of references (a), (b), (c), and this SOP. The following procedures will apply:

a. Prior to starting work, personnel and their supervisor(s) will conduct a fall hazard assessment, as defined by this SOP.

b. If the fall hazard assessment identifies fall hazards that cannot be eliminated, personnel and their supervisor(s) will complete section 1 of enclosure (2) and submit to a SERMC Fall Protection Competent Person.

c. If the work task involves working aloft onboard a Navy vessel, ensure aloft procedures are followed in accordance with reference (d) and the ship's, "aloft instruction". Complete a Work Authorization Form (WAF) to request ship's force tag out

the system(s) or equipment located in the aloft zone(s) where personnel will be working in accordance with references (e) and (f) prior to going aloft.

d. The SERMC Fall Protection Competent Person will determine what PFAS is required and verify personnel have received training required by section 10 of this SOP.

e. The SERMC Fall Protection Competent Person and End User will inspect the PFAS in accordance with section 11 of this SOP.

f. The SERMC Fall Protection Competent Person will document the equipment has been issued in section 2 of the submitted enclosure (2).

g. When the End User completes the assigned work, they will return the PFAS to a SERMC Fall Protection Competent Person. The SERMC Fall Protection Competent Person and End User will inspect the PFAS in accordance with section 11 of this SOP.

h. The SERMC Fall Protection Competent Person will complete section (2) of the submitted enclosure (2) to document the equipment has been returned.

**Note:** Contractor personnel assigned to SERMC are required to receive fall protection training from their employer in accordance with references (a), (b), and (c). Additionally, the contractor employer is responsible for providing their personnel with proper fall protection equipment. At no time will SERMC provide fall protection training or equipment to contractor personnel.

**Note:** When roof access is required at SERMC's facility (building 1488), personnel will first notify the Facilities Manager for permission to access the roof. SERMC Safety will also be notified to conduct a fall hazard assessment.

8. Fall Hazard Surveys/Assessments. SERMC conducts Fall Hazard Surveys/Assessments of the workplace to help identify potential fall hazards in accordance with Section B, Chapter 5 of reference (a). Understanding work procedures and how personnel conduct the required task is very important in the selection and development of the most appropriate fall protection method. The SERMC Fall Protection Program Manager/Assistant Program Manager will conduct a Fall Hazard Survey/Assessment:

a. Any time fall hazards are identified during evaluation of the work area by personnel and their supervisor. The worksite specific survey is documented using enclosure (2) of this SOP.

b. Annually of previously identified fall hazard areas using enclosure (1) of this SOP.

## 9. Fall-Hazard Prevention and Control Measures

a. The hierarchy or preferred order of control measures for fall hazards are:

(1) Elimination - Removing the hazard from a workplace. This is the most effective control measure (e.g., lower various devices or instruments, such as meters or valves to the height level of the individual, instead of servicing such devices or instruments at heights).

(2) Prevention - Isolating or separating the hazard from the general work areas (e.g., same level barriers such as guardrails, walls, or covers).

(3) Engineering Controls - If the hazard cannot be eliminated, isolated, or separated, engineering control is the next-preferred measure to control the risk (e.g., design change or use of different equipment or techniques such as aerial lift equipment).

(4) Administrative Controls - This includes introducing new work practices that reduce the risk of a person falling (e.g., erecting warning signs or restricting access to certain areas).

(5) Personal Protective Systems and Equipment - These will be used after other control measures such as eliminating or isolating a fall hazard are determined not to be practical, or when a secondary system is needed (e.g., when it is necessary to increase protection by employing a backup system).

**NOTE:** Control measures are not mutually exclusive. There may be situations when more than one control measure should be used to reduce the risk of a fall.

10. Training. Applicable SERMC personnel and their supervisors will be trained in accordance with references (a), (b), (c), and this SOP. The following training is required:

a. Initial Classroom Training. Initial classroom training will be provided by a SERMC Fall Protection Competent Person and cover topics listed in Appendix B13-D of reference (a). Training will be documented using ESAMS Course #4561 titled SERMC Fall Protection Training.

b. Practical/Hands-On Training. In addition to initial classroom training, End Users and their supervisors will complete practical/hands-on training in the use, care, and inspection of PFAS with a SERMC Fall Protection Competent Person. Training will be documented using ESAMS Course #3024 titled SERMC Hands-On Fall Protection Training.

c. Refresher Training. Will be completed every 24 months and will be documented using ESAMS Course #4561 titled SERMC Fall Protection Training.

d. Retraining. End Users will be retrained when:

(1) The End User has been observed using fall protection equipment in an unsafe manner.

(2) The End User has been involved in a near-miss or mishap involving fall protection equipment.

(3) The End User has received an evaluation that reveals he or she is not using the fall protection equipment properly.

(4) The End User is assigned a different type/style of PFAS; and/or

(5) A condition in the workplace changes in a manner that could affect the safe use of the fall protection equipment the End User is to utilize.

11. Inspection, Storage, Care, and Maintenance of Fall Protection Equipment. SERMC fall protection equipment will be inspected, stored, and maintained in accordance with reference (a) and the instructions provided by the equipment manufacturer. SERMC fall protection equipment will be inspected as follows:

a. Annually by a SERMC Fall Protection Competent Person using enclosure (3) as guidance.

b. Before and after each use jointly by the End User and Fall Protection Competent Person.

**Note:** Any equipment found to be damaged or defective during the inspection process will be immediately removed from service by a Fall Protection Competent Person.

12. Mishaps and Near-Miss Reporting. SERMC personnel who are involved in a near-miss or mishap while working at heights, exposed to fall hazards and/or using fall protection equipment will report the incident immediately to their supervisor and SERMC Safety. When fall protection equipment is deployed, activated or damaged during a fall, it will be returned immediately to SERMC Safety and removed from service.

13. Rescue Procedures. SERMC personnel who work at heights, are exposed to fall hazards, and/or use fall protection equipment, may experience a fall and require rescue. Prompt rescue is very important. SERMC relies on the training, skills and expertise of Naval Station Mayport Fire and Emergency Services (F&ES) and Jacksonville Fire and Rescue Department (JFRD) for Rescue Services. SERMC's rescue procedures include:

a. Methods of Rescue. F&ES and JFRD Rescue Technicians use technical rope rescue as the primary rescue technique. Rescue technicians may use other equipment such as vertical ladders and ladder trucks to assist with rescue.

b. Methods of Self-Rescue. SERMC End Users are not trained in self-rescue techniques, however; suspension-relief straps are installed on each full body harness and End Users are trained in their use in accordance with section (10) of this SOP.

c. Equipment Used. Naval Station Mayport F&ES and JFRD provide and maintain all equipment used during emergency response situations.

d. Specialized Training for Rescuers. Rescue Technicians are trained in accordance with NFPA 1006: Standards for Technical Rescuer Professional Qualifications.

e. Procedures for Requesting Rescue and Medical Assistance. The following procedures apply for SERMC personnel:



(1) SERMC Facility Rescue:

(a) Contact SERMC Chain of Command (CoC) - In the event personnel fall in the facility and are in need of rescue, other personnel in the area will immediately notify the SERMC Quarterdeck and provide the location of the incident, personnel involved, and the nature of the fall. The Quarterdeck will contact the SERMC Command Duty Officer (CDO) at 591-8008 and SERMC Safety to report the incident.

(b) Request Rescue Assistance - SERMC Quarterdeck will request rescue assistance from Naval Station Mayport F&ES by calling 9-911.

(c) Assess the Area - Personnel should assess the area for immediate hazards, secure and preserve the scene and wait for the rescue team to arrive.

(d) Stand-By for Rescue - The Rescue Team will consist of members of Naval Station Mayport F&ES. They are the only members trained and qualified to provide rescue service for an employee suspended in a full body harness.

(2) Shipboard Rescue:

(a) Contact Ship's Quarterdeck - Ship's force is the first responder to all emergencies on their vessel. If ship's force requires additional assistance from Naval Station Mayport F&ES or JFRD, ship's force will make the notification.

(b) Contact SERMC CoC - Contact the SERMC CDO at 591-8008 and SERMC Safety to report the incident.

(c) Assess the Area - Personnel should assess the area for immediate hazards, secure and preserve the scene and wait for the rescue team to arrive.

(d) Stand-By for Rescue - Initial rescue will be provided by ship's force In-port Fire and Rescue team. The backup rescue team will consist of members of Naval Station Mayport F&ES or JFRD. They are the only members trained and qualified to provide rescue for personnel suspended in a full body harness.

f. Transportation Routes. Personnel who have been rescued from a fall may need to be transported to a medical facility for evaluation. Naval Station Mayport F&ES or JFRD will determine

the best transportation route, depending on the location of the incident and which medical facility the injured employee is being transported to.

g. Pre-Incident Planning. SERMC Safety and Naval Station Mayport F&ES perform a joint evaluation on an annual basis of the work areas where personnel work at heights, are exposed to fall hazards and/or use fall protection equipment. Factors that are evaluated when assessing the potential situations are those that could affect emergency responders during rescue operations.

14. Audits and Evaluation. A documented Fall Protection Program audit will be conducted annually by the SERMC Fall Protection Program Manager/Assistant Program Manager.

15. Forms. The SERMC Fall Protection and Prevention Plan can be accessed from the SERMC Safety Department SharePoint page (<https://navsea.navy.deps.mil/sites/sermc/106/Forms/Enclosure%202%20SERMC%20Fall%20Prevention%20and%20Protection%20%20Plan.pdf>). This form can also be obtained by contacting the SERMC Fall Protection Program Manager/Assistant Manager in the Safety Office.

/s/

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